XLI COLEOPTERA, VIII:

PASSALIDAE AND LUCANIDAE.

By F. H. GRAVELY, *M.Sc., Assistant Superintendent, Indian Museum.*

PASSALIDAE.

The Passalidae collected during the Abor Expedition of 1911-12 were mostly found either in trees felled by troops at Kobo, where they could not have been on the ground for more than a few months, or in trees felled by Abors when preparing land for cultivation.

Five of the species found—*Taeniocerus bicuspis*, *Aceraius grandis*, *Macrolinus sikkimensis*, *Leptaulax dentatus*, and *Leptaulax bicolor*—have a wide distribution round the Abor country. It is, however, uncertain how far beyond the Abor country the typical Himalayan form of *Macrolinus sikkimensis* extends, this form being replaced in a great part at least of Burma by a local race of the same species.

All the remaining species are Himalayan, except *Leptaulax roepstorfi*, which is only known outside the Abor country from Burma and the Andamans. Of the Himalayan species *Tiberioides austeni* is only known, outside the Abor country, from the Dafla Hills;' *Aceraius himalayensis* extends into the Nàga Hills and *Leptaulax cyclotaenius* subsp. *himalayae* extends into Tonkin. The typical form of the last named species is Malaysian, and no form is known between the Himalayas and Tonkin on the one hand, and Perak in the Malay Peninsula on the other.

The collection, which has already been referred to in my "Account of the Oriental Passalidae" (*Mem. Ind. Mus.* III, 1914, pp. 177-353, pl. xi-xiii), is as follows :—

Genus **TAENIOCERUS**, Kaup.

This genus includes species found in all parts of the Oriental Region except the Indian Peninsula and Ceylon.

Taeniocerus bicuspis, Kaup.

Kobo, 400 ft., 1-xii-11—4-ii-12.
Rotung, 1400 ft., 1-i-12.
Upper Rotung, 2000 ft., 5-i-12.
Renging, 2150 ft., 19-xii-11.

This is the only species of the genus found north of the Malay Peninsula. It is recorded from the Malay Peninsula, Siam,

Cachar and the whole length of the E. Himalayas, so probably occurs throughout the hill ranges of Burma and Assam,

Genus **TIBERIOIDES**, Gravely.

Confined to the E. Himalayas, Assam, and Burma (probably Upper Burma).

Tiberioides austeni, Gravely.

Kalek, 3800 ft., 29-xii-11.

Previously known only from specimens collected in the Dafla Hills.

Genus **ACERAIUS**, Kaup.

This genus is recorded from the Philippines, Sunda Islands, Malay Peninsula, Burma, Assam, E. Himalayas, Southern China, and Formosa but not from the Indian Peninsula or Ceylon.

Aceraius grandis (Burmeister), subsp. **hirsutus**, Kuwert.

Kobo, 400 ft., 31-xi-11—8-xii-11.
Janakmukh, 600 ft., 18-xii-11.
Rotung, 1400 ft., 26-xii-11 and 1-i-12.
Upper Rotung, 2000 ft., 5-i-12.
Renging, 2150 ft., 4-xi-11.
Kalek, 3800 ft., 29-xii-11.

Aceraius grandis is found over the whole range of the genus. Its subspecies *hirsutus* is the form characteristic of continental Asia (excluding the Malay Peninsula), the Philippines and Formosa.

Aceraius himalayensis, Gravely.

Sirpo River nr. Renging, March 1912.

Although the species apparently occurs throughout the Eastern Himalayas and southwards into the Naga Hills, it does not seem to be very common. Only a single specimen was obtained during the Abor Expedition; this was collected by M. de Courcy.

Genus **MACROLINUS**, Kaup.

The section of this genus to which the Abor species belongs is known only from the Andamans, Nicobars, Burma and the Eastern Himalayas.

Macrolinus sikkimensis, Stoliczka.

Kobo, 400 ft., 30-xi-11—9-xii-11.
Janakmukh, 600 ft., 15-xi-11.
Rotung, 1400 ft., 25-xii-11—1-i-12.

This species occurs throughout the Eastern Himalayas, and a local race of it is known from Burma. One of the specimens from Kobo approaches this race somewhat in character.

Genus **LEPTAULAX**, Kaup.

Widely distributed over the Indo-Australian Region.

Leptaulax dentatus (Fabr.) *s. str.*

Kobo, 400 ft., 2-xii-11 and 8-xii-11.
Janakmukh, 600 ft., 18-x-11.
Rotung, 1400 ft., 28-xii-11.
Upper Rotung, 2000 ft., 9-i-12.
Renging to Rotung, 2600 ft., 20-xii-11.
Kalek, 3800 ft., 29-xii-11.

A very variable and widely distributed species. Its range appears to coincide with that of the genus.

L. cyclotaenius, Kuwert, subsp. **himalayae**, Kuwert.

Renging, 2150 ft., 19-xii-11.

This form is only known in addition from the Dafla Hills and Tonkin. *L. cyclotaenius*, s. str., the only other known form of the species, is a Malaysian insect and is not known to occur north of Perak.

Leptaulax bicolor, Fabr., *s. str.*

Janakmukh, 600 ft., 18-xii-11.

This species, like *L. dentatus*, is very variable, and has the same zoogeographical range as the genus.

Leptaulax roepstorfi, Kuwert.

Yembung, 1100 ft., 8-ii-12.
Rotung, 1400 ft., 24-xii-11.

This remarkably flat insect was originally described from the Andamans, and has since been described from Tenasserim. This record extends its known range northward very considerably.

LUCANIDAE.

Very few Lucanids were collected. They are as follows :—

Metapodontus impressus, Waterhouse.

Kobo, 400 ft., 6-xii-11, under log (♂).

The Indian Museum possesses a female from the Darjeeling District. No other precise records appear to have been made.

Eurytrachelus sp. ♀

Janakmukh, 600 ft., 18-xii-11, in rotten wood.

Gnapholoryx velutinus, Thomson.

Kobo, 400 ft., 30-xi-11, in rotten wood (♂).

The Indian Museum possesses a female from Darjeeling, 7000 ft., and one from 1000-3000 ft. in the Darjeeling District. No other precise records appear to have been made.

Aegus labilis, Westwood.

Upper Rotung, 4-i-12, under leaf-stem of plantain (♀).

The Indian Museum possesses specimens from the Dafla Hills, Southern Shan States, and Andaman Islands. The species has also been recorded from Darjeeling.

? **Cardanus** sp.

Rotung, 1400 ft., 23-xii-11, in rotten wood.